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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/069,476	07/01/2002	Jorg Peter Schur	von Kreisler.021	3376
110	7590	09/20/2004	EXAMINER	
DANN, DORFMAN, HERRELL & SKILLMAN 1601 MARKET STREET SUITE 2400 PHILADELPHIA, PA 19103-2307			LEVY, NEIL S	
			ART UNIT	PAPER NUMBER
			1616	

DATE MAILED: 09/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/069,476	Applicant(s) SCHUR, JORG PETER	
	Examiner Neil Levy	Art Unit 1616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 4/24/04.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15, 17, 23-26, 52 is/are pending in the application.
- 4a) Of the above claim(s) 52 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15, 17, 23-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-15, 17, 23-26, 52 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

The incorporation of essential material in the specification by reference to a foreign application or patent, or to a publication is improper. Applicant is required to amend the disclosure to include the material incorporated by reference. The amendment must be accompanied by an affidavit or declaration executed by the applicant, or a practitioner representing the applicant, stating that the amendatory material consists of the same material incorporated by reference in the referencing application. See *In re Hawkins*, 486 F.2d 569, 179 USPQ 157 (CCPA 1973); *In re Hawkins*, 486 F.2d 579, 179 USPQ 163 (CCPA 1973); and *In re Hawkins*, 486 F.2d 577, 179 USPQ 167 (CCPA 1973).

The attempt to incorporate subject matter into this application by reference to WO 9629859 and WO 9858540 is improper because foreign references are not incorporable.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Newly submitted claim 52 is directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: the independent claim is to anti-microbial effects; Larvae do not qualify-the claim is drawn to subject matter, as insects, worms, Larvae, not microbes and patentably distinct from microbes.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claim 52 stands withdrawn from consideration

as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Claims 1-15, 17, 23-26 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The rejection of record is maintained. Tables applicant directs us to show minor antimicrobial effects (10,000 mold/g, control compared to 1,000) when treated with specific ratio and amounts of the mix of 5 compounds, not 1, 2, 3, or 4. Further; the treatment disclosed is not to post harvest tobacco, wheat or any other plant fruit or portion-it is to the whole plant culture (p.26). The larvae have nothing to do with the claimed method.

Claims 2, 12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

These claims are identical.

Claims 1-15, 17, 17, 23-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schur WO 96/29895 in view of Mc Cardle 5747416, Beilfuss et al CA 2012288 Bessette et al WO 98/54971, and Stevenson 5091405.

Schur provides Gras compounds in antimicrobial compositions to post harvest plant portions inclusive of wheat, bread; (p.11 line 19). Schur shows the equivalence of

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benzyl alcohol, phenylethyl alcohol, propylene glycol, m-butyl alcohol and isobutyl alcohol (p.7).

One or more of these compounds are used in the antimicrobial compositions. Also used are phenols, thymol, safrole (p.8) and tannic acid; equivalent to tanin (p.8, 44), and/or, equivalently lactic acid. Less than 50% Benzyl alcohol can be utilized with only 1 other of the compounds, or more if desired, to attain a microbiocidal effect.

Rapeseed oil is not discussed.

Mc Cardle shows sprayable compositions for plant treatment inclusive of antimicrobial agents, with adjuvants (col.3, lines 5-28). Acidulants are shown to be equivalently tannic or lactic acid (col.7, lines 8-11); mixtures are also taught. Solvent systems include water and propylene glycol (col.7, line 28-33).

Beil fuss shows aqueous sprayable compositions for plant treatment inclusive of antimicrobial agents, with adjuvants (p.4). Phenolics are 1-80%, no polyphenols are seen. Alcohols are equivalently or mixes, of phenylethanol or benzyl alcohol. Antimicrobial efficacy is disclosed (p.11, p.12).

Bessette (p.,15) also shows mixes of phenol compounds with phenyl and phenylethyl alcohols (3c) applicable to plants in aqueous or vegetable oil solvents (p.19).

Stevenson shows crop oils as equivalently castor oil Rapeseed oil, soybean oil (col.54) when applied to crops in compositions with other microbials, diluents as sprays (col.56).

Schur-WO shows equivalence of tannic acid and tannin, as polyphenol to be mixed with benzyl alcohol and other GRAS compounds (p.4, 5) to apply to wheat products, bread (p.22).

The primary references disclose the essence of the instant invention as claimed, but do not specify each and every concentration or element of the instantly claimed compositions. However, the secondary reference solves the problem of the primary reference, providing the equivalent and use components in compositions applied to plants or plant parts as protective compositions. Schur provide the instant components, show they can be used as single or multiple ingredients; show the equivalence of these components and show concentrations as instantly, claimed, exemplifying benzyl alcohol as a favored, but not required, component; all directed to treating after harvest foods (inclusive of wheat a universally recognized bread component, to reduce microbes. Mcardle, Beilfuss and Bessette also show use of limited mixes of the instant components, also for treating plants, and at instant concentration thus with attendant instant antimicrobial effects.

Thus, the artisan would find it obvious to prepare particular ingredient combinations, depending upon the factors typically used in the art, inclusive of ingredient compatibility, flavor, stability, handling, and cost considerations, besides those of desired number of applications, length of time for desired protection, ease of handling, target species, degradation, for example.

It has not clearly been established by objective showing of some unobvious and/or unexpected results that the administration of the particular form of active, carrier,

of the time to be treated provides any greater level of prior art expectation as claimed. Further, no criticality as to the particular compound or mixes thereof has been shown by applicant. Rapeseed oil and castor oil are shown as equivalent, by Stevenson thus either would serve, in the Bessette example for instance tannin and tannic acid are shown by Schur, WO, as equivalent; thus either, or both, in the Schur patents, would serve as obvious components, or would replace the tannic acid or lactic acid of Mc Cardle. Beilfuss shows neither tannic acid or tannin is required in phenol antimicrobial mixes, thus the combination of alcohols of Schur would also be an obvious compositional approach to provide antimicrobial efficacy. None of these ingredients as equivalents or combinations has been shown to interfere with their utilization in these prior art compositions to provide protection when sprayed on crop or plant parts, thus the instant essentiality is not seen as exchanging them.

The selection of each ingredient and amount thereof is a result effective parameter chosen to obtain the desired effects. It would be obvious to vary the nature of each ingredient to optimize the effects desired, and the use ingredients for the functionality for which they are known to be used is not a basis for patentability.

It would have been obvious to one with ordinary skill in the art at the time of the instant invention, to arrive at a composition of the instant components since all the teachings referenced show their use. The specific weights, and additives are result effective parameters subject to control by one with skill in the art.

Applicant's arguments filed 6/24/04 have been fully considered but they are not persuasive. Applicants agreements are directed to the 5 components shown effective

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when wheat or tobacco plants are treated. However, individual treatments, or mixes of less than 5 components were not at all disclosed as effective post harvest antimicrobials. The prior art shows the equivalence of the claimed ingredients, including the carrier vegetable oils. The prior art provides at least the application of antimicrobially effective composition of the instant components, to wheat containing or other plant products, as does the instant disclosure and invention as claimed.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Neil Levy whose telephone number is 571-272-0619. The examiner can normally be reached on Tuesday-Friday from 7:00a.m to 5:30p.m.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Kunz, can be reached on 571-273-0887. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Levy/tgd

September 9, 2004



NEIL S. LEVY
PRIMARY EXAMINER